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**Cc:** Tsang, Frank[TsangC@cdmsmith.com]; Budney, Sharon[BudneySL@cdmsmith.com]
**From:** Picunas, Amy
**Sent:** Wed 12/18/2013 11:11:10 PM
**Subject:** RE: Placement of Geotextile on top of A Cap under the Water in Passaic River

One other suggestion is to attach the shoreline end of the geotextile roll to an I-beam (as described in the geosyntheticsmagazine.com article, see the website hyperlink below). This will help to secure the geotextile while rolling it out, and help counteract the wind forces on the geotextile.

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**From:** Picunas, Amy
**Sent:** Wednesday, December 18, 2013 5:56 PM
**To:** 'Stan Kaczmarek'; Vaughn, Stephanie (Vaughn.Stephanie@epa.gov); Beth Franklin (Elizabeth.A.Franklin@usace.army.mil); Michael Hoppe
**Cc:** Tsang, Frank; Budney, Sharon
**Subject:** Placement of Geotextile on top of A Cap under the Water in Passaic River

Hi Stan and Stephanie,

We did a little internal research to find alternatives for installing the geotextile fabric. The bullets below offer some suggestions, however we think the plan for "Deploying Sewn Panels" (see bottom of this email) might be the best suggestion.

Rolling out the fabric along the river bottom should help counteract the river current effects on fabric placement and stop the fabric from twisting during armor stone placement. One drawback we identified is maintaining control over the fabric roll as it's being rolled out (i.e., how do we prevent the roll from unspooling excessively fast).

These are merely suggestions for you to consider, and may not be feasible. Please feel free to contact Frank, Sharon or myself if you have any questions, thanks!

•□□□□□□□ Depending on the velocity of the currents in the project area, would it be possible to use a moderate to heavy weight turbidity curtain to divert the currents so the water in the work area is relatively calm.

•□□□□□□□ Also, is it possible to attach light weights (small sand bags?) to the geotextile at some increment to temporarily hold the geotextile in place. The sand bags could be attached starting at the end and then attached to the geotextile as it rolled out from off the barge. This may require more overlap for the geotextile to accommodate the weight.

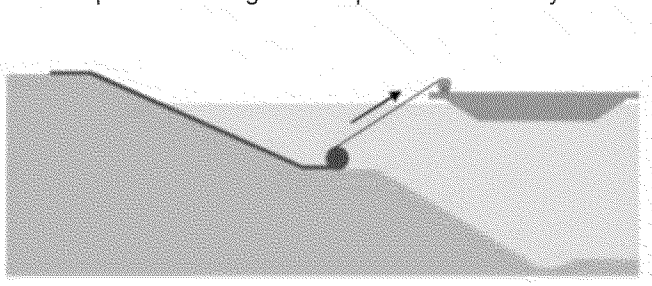
•□□□□□□□ Aligning the direction of the geotextile with the currents instead of aligning laterally from shore across the river. Started upstream, rolled a bit downstream (downcurrent), then put rocks on top, then rolled a bit more, that could work. they could attach buoys to the corners/edges of the geotextile to see if the geotextiles has slipped/moved.

•□□□□□□□ May want to check out this web site: http://geosyntheticsmagazine.com/articles/1006_f2_seafloor_remediation.html it has some examples.

## Deploying Sewn Panels (Larger Projects)

Scrap rebar can be used as sacrificial ballast and attached to the geotextile along its length using cable ties, wire or tape. Unroll the geotextile on level ground and attach one end to a steel core. Attach two lengths of rope to the core and lay the rope along the geotextile. Roll the fabric and ropes onto the core and transport it to the installation area.

Locate the exact position of the previous geotextile panel. Divers may be necessary for this. In shallow water, attach floats to the edges of the geotextile. Spraying white lines on the edges of the fabric may be useful in some waters. The rolled geotextile panel can now be lowered into position by unwinding the ropes. On long slopes, it may be more effective to place the roll on the slope shoulder and have the ropes hauled from on board a barge. A layer of rock should be placed on the geotextile panels immediately to ballast it.



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For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

********** ATTACHMENT NOT DELIVERED **********